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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,411	02/25/2004	Kazunori Yamauchi	046124-5274	9803

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EXAMINER	
NGUYEN, SANG H	

ART UNIT	PAPER NUMBER
2877	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/785,411	YAMAUCHI, KAZUNORI	
	Examiner	Art Unit	
	Sang Nguyen	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 9-16* is/are rejected.

7)☒ Claim(s) *5-8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08/17/05 &08/09/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 08/09/04 and 08/17/05 has been entered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

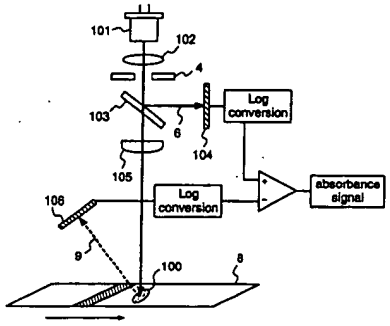
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi et al (EP 124696) in view of Brusting (U.S. Patent No. 4,632,559).

Regarding claims 1, 12, and 16; Miyoshi et al discloses a measuring device (figures 1-8) for immunochromatography test piece (8 of figure 1) comprising an irradiation optical system having a semiconductor light emitting element (101 of figure 1) for irradiating measurement light onto an immunochromatography test piece (8 of figure

1), a beam shaping member (4 of figure 1) for shaping light from the semiconductor light emitting element (101 of figure 1), into beam of a beam section extending a direction substantially parallel colored line (83, 100 of figure 1B and figures 2A-2B and 3A-3B) formed on the immunochromatography test piece (8 of figure 1), and a lens (102, 105 of figure 1) for focusing the beam from the beam shaping member (4 of figure 1) on immunochromatography test piece (8 of figure 1) and a detection optical system having a photodiode (106 of figure 1) for detecting reflected light (9 of figure 1) from the immunochromatography test piece (8 of figure 1) under irradiation with the measurement light, wherein the immunochromatography test piece (8 of figure 1) is putted on a pedestal (311, 312 of figure 17). See figures 1-2.

Fig.1 (a)



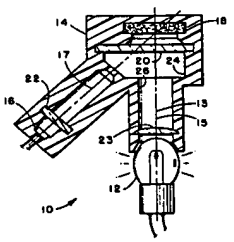
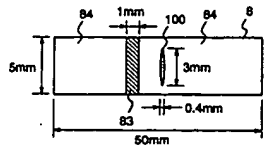


FIG. 1

Fig.1 (b)



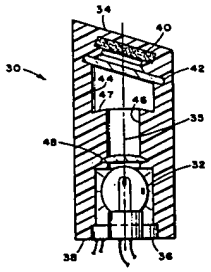


FIG. 2

Miyoshi et al discloses all of features of claimed invention except for said irradiation optical system comprises first baffle portion tubular shape for removing stray light, which disposed between the semiconductor light emitting element and beam shaping member; a second baffle portion of tubular shape for removing stray light, which disposed between the beam shaping member and the lens; and a third baffle portion of tubular shape for removing stray light, which disposed between the lens and the immunochromatography test piece. However, Brunsting teaches that it is known in the art to provide irradiation optical system (i.e., a reflectance measuring device [32 of figure 2]) comprises first baffle portion tubular shape (figure 2, i.e., light source [32 of figure 2])) for removing stray light, which disposed between the semiconductor light emitting element (32 of figure 3) and beam shaping member (i.e., aperture of figure 2); a second baffle portion of tubular shape (46 of figure 2, i.e., between of reflectance measuring device [30 of figure 2])) for removing stray light, which disposed between the beam shaping member (figure 2) and the lens (48 of figure 2); and a third baffle portion of tubular shape (44, 47 of figure 2) for removing stray light, which disposed between the lens (48 of figure 2) and the immunochromatography test piece (40 of figure 2). See figures 1-2.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method and device of Miyoshi et al with said irradiation optical system comprises first baffle portion tubular shape for removing stray light, which disposed between the semiconductor light emitting element and beam shaping member; a second baffle portion of tubular shape for removing stray

light, which disposed between the beam shaping member and the lens; and a third baffle portion of tubular shape for removing stray light, which disposed between the lens and the immunochromatography test piece as taught Brunsting fot the purpose of reducing the light beams from baffles in the light transmission paths from light source.

Regarding claims 2 and 13; Brunsting discloses tubular space portion (38 of figure 2, i.e., a housing or covering) with a diameter larger than that the first baffle portion (36 of figure 1), which is disposed between the first baffle portion and the beam shaping member (figures 1-2).

Regarding claims 3 and 14; Brunsting discloses the tubular space portion (38 of figure 2) with a diameter larger than that the second baffle portion (46 of figure 2), which is disposed between the beam shaping member and the second baffle portion (figures 1-2).

Regarding claims 4 and 15; Brunsting discloses further comprises the tubular space portion (38 of figure 2) with a diameter larger than that the third baffle portion (44, 47 of figure 2), which disposed between the lens and third baffle portion, which is disposed between the lens and the third baffle portion (figures 1-2).

Regarding claim 10; Miyoshi et al discloses the semiconductor light emitting element is a light emitting diode (101 of figure 1).

Regarding claim 11; Miyoshi et al discloses the beam shaping member (4 of figure 1) is a platelike member which a slit (4a of figures 2A-2B) extending direction substantially parallel to the colored line (100, 83 of figures 2A-2B) formed on the immunochromatography test piece (8 of figure 1) is formed.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi et al in view of Brunsting as applied to claim 1 above, and further in view of Strohmeier et al (U.S. Patent No. 4,676,653).

Regarding claim 9; Miyoshi et al discloses all of features of claimed invention except for optical head on which optical system and are mounted; a placing plate for placing of the immunochromatography test piece; and scanning mechanism effecting relative movement between the placing plate and the optical head colored line. However, Strohmeier et al teaches that it is known in the art to provide optical head (figure 1) on which optical system (10 of figure 1 is optical unit) and are mounted; a placing plate (11 of figure 1) for placing of the immunochromatography test piece; (13, 15 of figure 1) and scanning mechanism (figures 1 and 3-4) effecting relative movement between the placing plate and the optical head colored line. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method and apparatus of Miyoshi et al with optical head on which optical system and are mounted; a placing plate for placing of the immunochromatography test piece; and scanning mechanism effecting relative movement between the placing plate and the optical head colored line as taught by Strohmeier et al for the purpose of determining the reflectivity of a sample surface of small dimemsions.

Allowable Subject Matter

Claims 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamauchi (6819422) discloses measuring method for immunochromatographic test strip; Kramer et al (5028139) discloses readhead for reflectance measurement of distant sample; Dosmann (4930865) discloses optical transmission spectrometer; Kramer (4310249) discloses spectrophotometer; or Charlson et al (3700333) discloses method and apparatus for making an in-situ determination of the chemical properties.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 23, 2006

Sang Nguyen
Patent Examiner
Art Unit 2877